

The Cohort Fertility transition in Slovakia. The postponement and recuperation process.

The collapse of the communist system and the following period of social and economic transformation of society caused dramatic profound changes in the reproductive behaviour of Slovak population.

The specific patterns of demographic behaviour during totalitarian communist society led to the situation that Slovakia in the late 1980s still belonged to the countries with the highest fertility across Europe. Fertility was concentrated at the very beginning of the reproductive period and was relatively high. The reproductive model was gradually intercohort (especially the women born in 1940s and 1950s) accepted during the state socialism era was characterized with two children, lower proportion of women with one child and marginal proportion of childless women. For example women with two children born during 1950s reached 40-45%, the proportion of childless women was slightly increasing from 7 to 10% and proportion of women with one children reached 11-13%.

Postponement of important life course transition with connection to the reproduction – leaving the parental home, resident and economic independence, enter to the marriage and parenthood became widespread among young people born in 1970s and 1980s. One of the most important factor influencing timing of these life course transitions is education. As shown our results, in Slovakia being enrolled in education is incompatible with life in marriage and motherhood and parenthood. These and other economic and normative factors may be the causes of observed changes in the nature and intensity of cohort fertility among young women in Slovakia. Transition in cohort fertility of women born in the 1970s and 1980s indicates that their completed fertility will be considerably lower and the proportion of women with one child or no children will increase.

In our study we analyzed cohort fertility development in Slovakia with emphasis on changes in last two decades. The cohort analyses using the basic indicators: age-specific cohort fertility rates, completed cohort fertility rate, average age of cohort childbearing (first birth), cohort parity distributions and parity progression ratios.

The study of changes in cohort fertility with emphasis on the postponement and recuperation process after collapse of the authoritative regime in Slovakia was based on benchmark model. This approach has been used in number of very similar variations (see Frejka and Calot 2001, Lesthaeghe 2001, Frejka and Sardon 2004). In our case we follow the innovative methodological procedure proposed by Sobotka et al. (2011a).

The postponement and recuperation process was measured by age for any cohort of interest, which was compared with an older benchmark cohort. For benchmark cohort we have chosen, according to Sobotka et al. (2011ab) first cohort that experienced an increase in the mean age at first birth that continued for at least five cohorts.

Postponement in this meaning represents cumulative fertility decline (absolute or relative) in all ages when fertility has fallen in comparison with selected benchmark cohort. On the other side, recuperation express fertility increases in all ages when fertility has increased.

For this purpose we used three important indicators: initial fertility level (from benchmark cohort), cumulative fertility decline at younger ages and relative degree of fertility recuperation at older ages (for each cohort of interest). From these information was computed some indicators which describe cohort fertility changes among young Slovak women born in 1970s and 1980s.

Postponement measure reflects the maximal gap between the cohort of interest and the benchmark cohort. It measures the depth of the decline in cohort fertility at younger ages. Recuperation measure signs the absolute increase of cohort fertility at older ages from the age when the postponement process reached maximum to end of reproductive period.

From postponement and recuperation measure was derived final difference as a permanent decline (or increase in situation of overcompensation) between the cohort of interest and benchmark cohort. Then recuperation index measuring the degree of recuperation in older ages relative to the cumulative decline of fertility in younger ages in cohort of interest.

Each of previous indicators was specified by birth order and compared with situation in selected European countries.

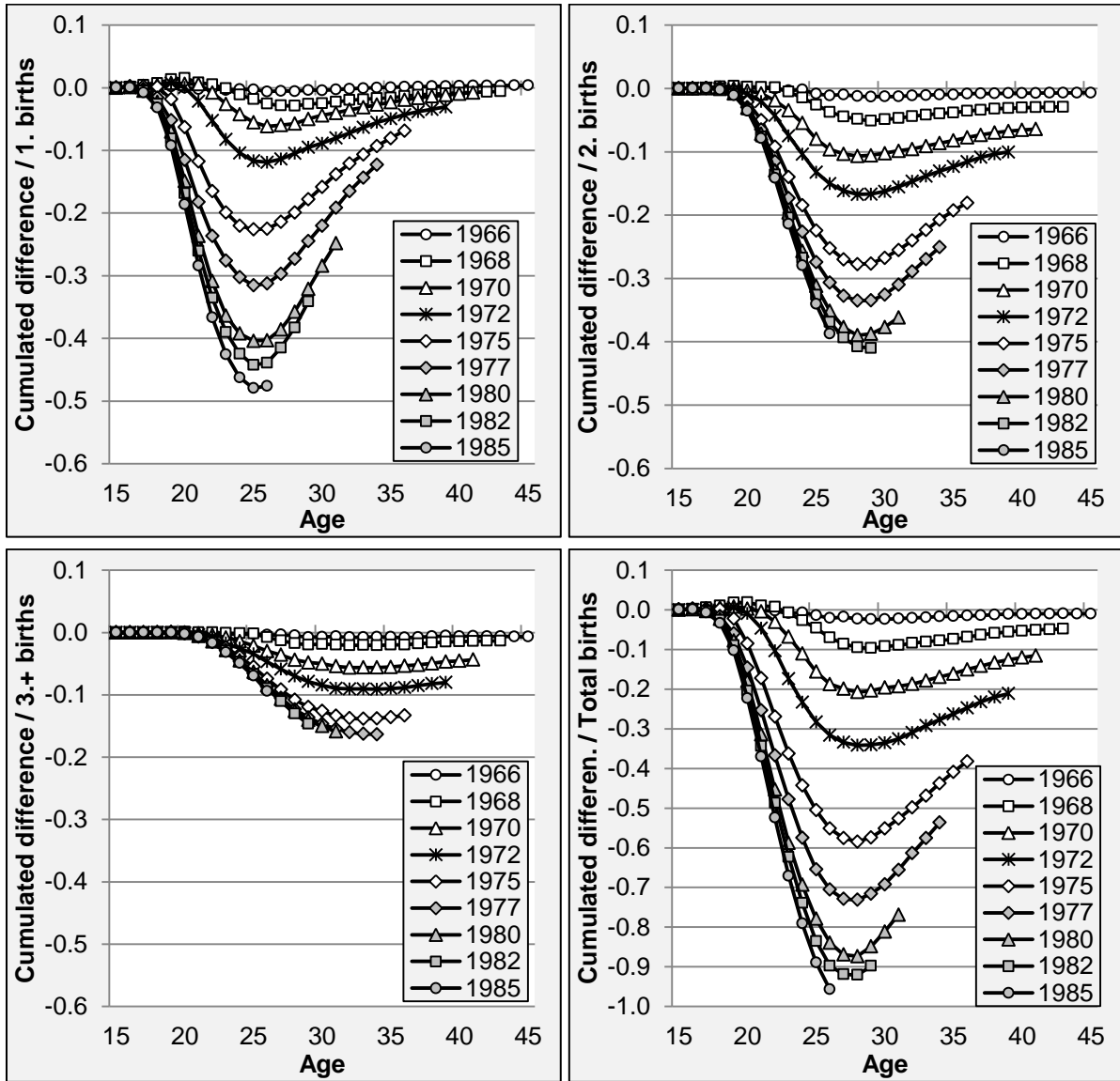
In addition, the age divided the postponement and recuperation phases of fertility were constructing for each cohort of interest and birth order separately. It was based on age of maximum measure of cumulative fertility decline in comparison with benchmark cohort. This approach allowed us to analyze the real degree of cohort fertility postponement and following recuperation from the point when the postponement phase was reached the maximum.

The intercohort dynamics of postponement was studied with moving benchmark cohort. We compare the fertility development for each selected cohort with previous cohort born five years earlier.

It is apparent that the process of postponing fertility into the late 20s or 30s in Slovakia started among the cohorts in the first half of 1970s. The force of fertility recuperation differs widely by birth order. Our analysis has showed an earlier decline with relatively strong recuperation in first birth rates and later decline with significantly lower force of recuperation in second and higher-order. It seems to be, that the decline in second and mainly in third and higher-order will be in young cohort permanent. The dominant position in terms of postponing fertility in cohort perspective has postponement of the first-order births, but the final overall decline of the cohort fertility will be saturated by low recuperation of the second and higher-order births. Cohorts born in 1970s and especially in second half of 70s all of them are characterized by intensive fall of fertility in younger ages with intercohort increase the size of the cumulative fertility gap (between cohort of interest and benchmark cohort). In cohort born in 1980s the dynamic of intercohort spreading the postponement process was less pronounced from one cohort to another.

Annex:

Fig. 1-4: Cumulated cohort fertility by birth order compared to the benchmark cohort (1965)



- FREJKA, T., SARDON J-P. 2004: Childbearing trends and prospects in lowfertility countries: A cohort analysis. *European Studies of Population*, 13. Dordrecht, Kluwer Academic Publishers.
- FREJKA, T., CALOT G. 2001. Cohort reproductive patterns in low fertility countries. *Population and Development Review* 27 (1): 103-132.
- SOBOTKA, T., ZEMAN, K., LESTHAEGHE, R., FREJKA, T. 2011a. Postponement and recuperation in cohort fertility: New analytical and projection methods and their application. In. *European Demographic Research Papers 2-2011*. Vienna: Vienna Institute of Demography. 86 pp.
- SOBOTKA, T., ZEMAN, K., LESTHAEGHE, R., FREJKA, T., NEELS, K. 2011b. Postponement and Recuperation in Cohort Fertility: Austria, Germany and Switzerland in a European Context. *Comparative Population Studies - Zeitschrift für Bevölkerungswissenschaft*. Vol 36, No 2-3, pp. 417-452
- LESTHAEGHE, R. 2001. Postponement and recuperation: Recent fertility trends and forecasts in six Western European countries. Paper presented at the IUSSP Seminar "International perspectives on low fertility: Trends, theories and policies." Tokyo, 21-23 March 2001.